Atmosphere Group Ancillary Data Issues

Have we identified all the data sets we need for V2?
Surface emissivity map? ~ *BRYAN*
Surface albedo map?
DAO data (HDFEOS Format)

Do we know we have access to them in the processing environment?

Do we have all the tools we need to use the data?
Unpacking (GRIB format issue) ✓
Reading ✓
Collocation ·
Interpolation (time and space) ·
Visualization

Do we feel confident in the scientific quality of the data sets?
DAO data?

ARCHIVE

· LOCATION OF LAND'SEA MASK

Ancillary Data for MODIS Operational Processing

Ž Many different ancillary data types will be used as input to UW
  production software

Ž Which data sets do we have the least experience with?

Ž Must learn more about the strengths and weaknesses of DAO data. Will
  remove one more unknown from the host of unknowns at launch.

Ž How can we learn more about the scientific quality of the data sets?

  1) Compare with data sets we are more familiar with (i.e. NMC)
     Some documentation does exist. Not always clear how affects
     end product (Bryan?)

  2) Compare results of products using historical ancillary data versus
     new data type.

Ž Goal - Determine the scientific quality of the DAO data.

ŽMethod: Run HIRS global operational cloud top properties product
  software using DAO temperature and moisture profiles as inputs in
  parallel with current processing. Determine the quality of the final product
  and the cause of any differences.

Ž Status: Working with David Lamich of DAO staff who provided me with:

  Access to daily real-time DAO requested products

     Surface pressure
     Surface temperature
     Temperature Profile at **13** Levels
     Moisture Profile at **13** Levels

     Binary format, 2.5 x 2.0 degree grid available on ftp site to
     hers.gsfc.nasa.gov

  In the process of converting the files to McIDAS format for parallel
  processing. Should have some initial conclusions by end of the year.